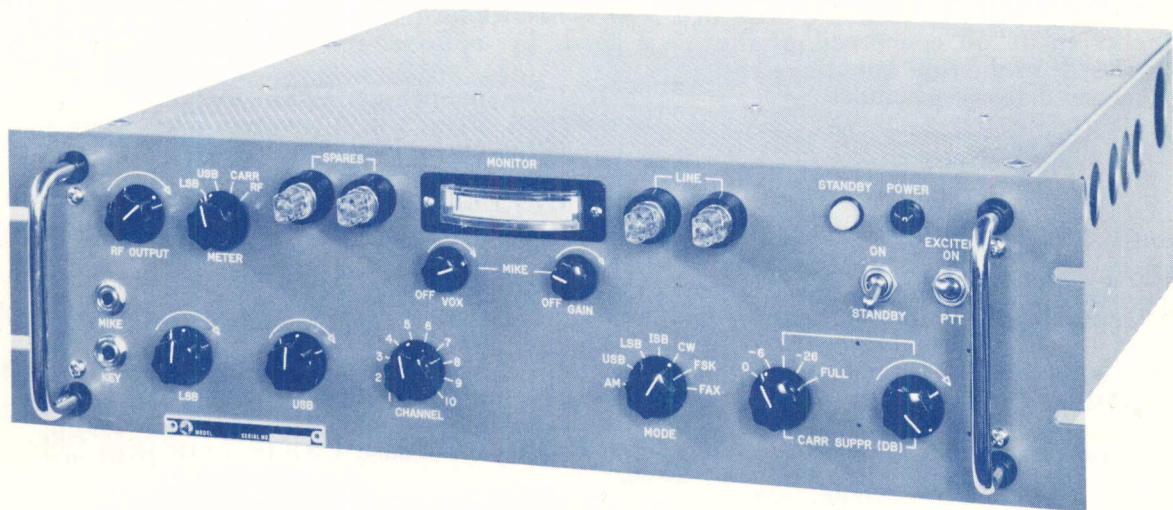


F. Levi

TMC TECHNICAL BULLETIN 2030A

Sideband Multi-Channel Exciter
TMC Model SME-6



* *One Basic Model.*

* *Solid State Exciter.*

* *Remote Control Option.*

* *Frequency Range 1.6 MHz to 30 MHz.*

* *Options for USB or LSB, ISB, AM, FSK/FAX.*

* *Nine Preset Channels for FSK/FAX Operations.*

* *Ten Preset Channels for CW, USB/LSB, ISB or AM.*

**Sideband Multi-Channel Exciter
TMC Model SME-6**

The Technical Materiel Corporation Model SME-6 Sideband Multi-Channel Exciter is the latest development in the solid state exciter series and consequently takes full advantage of experience gained in the production of the previous SME models, which the SME-6 supercedes.

The production of one basic model designed to meet all anticipated requirements, by the judicious selection of appropriate options, will greatly simplify the task of selection and ordering, and will also assure all concerned of the benefits of increased production quantities and consequent enhanced delivery schedules.

The entire frequency range from 1.6 MHz to

30 MHz is most effectively covered by the incorporation of nine plug-in coil assemblies. Rapid tuning within this frequency range is accomplished on the basis of ten preset crystal controlled channels (nine for FSK/FAX optional method of operation), and, of course, may be accomplished by remote control if that option is selected.

The power output of from 0 to 250 milliwatts PEP is easily adjusted from the front panel, or, if desired, by optional remote control facilities.

Each audio channel contains an integral, specially designed circuit which prevents inadvertently overload the transmitter.

TECHNICAL SPECIFICATIONS

FREQUENCY RANGE:

1.6 - 30 MHz by plug-in RF Module with plug-in coil assemblies covering the following frequency ranges: 1.6-2.0, 2.0-3.0, 3.0-4.0, 4.0-6.0, 6.0-8.0, 8.0-12, 12-16, 16-24, and 24-30.

MODES OF OPERATION:

CW.
Options of USB or LSB, ISB, AM, FSK/FAX.

POWER OUTPUT:

0 to 250 milliwatts PEP adjustable from the front panel.
Optional remote control.

OUTPUT IMPEDANCE:

Nominal 50 ohms unbalanced.

TUNING:

Ten preset crystal controlled channels over the range of 1.6 to 30 MHz. Nine preset crystal controlled channels when using the FSK/FAX option.

FREQUENCY STABILITY:

Temperature controlled crystal oscillator for maximum of ± 50 Hz over ambient temperature range of 0°C to $+50^{\circ}\text{C}$, or Proportional controlled oven for ± 10 Hz over range of -30°C to $+50^{\circ}\text{C}$.

SIGNAL/DISTORTION RATIO:

Distortion products are at least 40 db below either tone of a two tone test at 250 milliwatts PEP output.

UNWANTED SIDEBAND REJECTION:

Better than 50 db down at full PEP output.

SPURIOUS SIGNALS:

Better than 60 db down at full PEP output.

NOISE LEVEL:

Better than 60 db down at full PEP output.

TECHNICAL SPECIFICATIONS (continued):

CARRIER INSERTION:	Automatically set -6, -26, or greater than -55 db below PEP. Also adjustable from 0 db to at least -55 db below PEP. -6, -26, -55 db plus one preset level may be selected by optional remote control.
AUDIO RESPONSE:	+2 db 300 Hz to 7.5 kHz in AM mode. +2 db 300 to 3300 Hz in sideband mode. Filter options: +2 db 250 to 3040 Hz. +2 db 250 to 6080 Hz.
AUDIO INPUT:	-20 to +10 dbm at 600 ohms balanced or unbalanced input, or -55 dbm low impedance microphone with push-to-talk or VOX control.
OVERLOAD LIMIT:	Each audio channel contains a special built-in circuit which prevents overloading the transmitter.
VOICE OPERATED RELAY:	Voice controlled switch with adjustable threshold.
CW KEYING:	Front panel jack or rear panel dry contact keying circuit at 200 bauds.
FSK INPUT KEYING:	20 or 60 milliamperes, 50 or 100 volts, dry contact keying.
FSK SHIFT:	+425, +212, +106, +53 Hz.
FSK KEYING SPEED:	200 bauds.
FAX INPUT	+1 to +10 volts for frequency shift or ± 500 Hz.
METERING:	Front panel metering of USB, LSB, carrier and output.
ENVIRONMENTAL CONDITIONS:	Designed to operate in an ambient temperature range of 0°C to 50°C at any value of relative humidity up to 95% Operation to -30°C optional
STORAGE CONDITIONS:	Equipment is not materially affected by storage at -40°C to +85°C at relative humidity of 95%.
SAFETY FEATURES:	One AC power input fused.

TMC TECHNICAL BULLETIN 2030A

**Sideband Multi-Channel Exciter
TMC Model SME-6**

ORDERING INFORMATION & ORDER FORM

The customer may use the following form as a guide in telling his TMC Salesman or Representative of his specific requirements.

OPERATING FREQUENCIES (Please indicate carrier frequency desired)

Channel 1: _____ Channel 2: _____ Channel 3: _____
 Channel 4: _____ Channel 5: _____ Channel 6: _____
 Channel 7: _____ Channel 8: _____ Channel 9: _____
 Channel 10 _____ OR FSK/FAX OPTION

MODES OF OPERATION

- CW
- USB
- LSB
- AM
- FSK/FAX

FREQUENCY STABILITY

- Temperature controlled crystal Oscillator for maximum of +50 Hz over ambient temperature range of 0°C to +50°C.
- Proportional controlled oven for +10 Hz over range of -30°C to +50°C.

AUDIO RESPONSE

- +2 db, 300 to 3300 Hz USB
- +2 db, 250 to 3040 Hz USB
- +2 db, 250 to 6080 Hz USB
- +2 db, 300 to 3300 Hz LSB
- +2 db, 250 to 3040 Hz LSB
- +2 db, 250 to 6080 Hz LSB

TYPE OF OPERATION

- Manual operation.
- Automated operation.
- Remote controlled operation.

POWER SUPPLY

- 115V AC, 50/60 cycle 1 phase.
- 230V AC, 50/60 cycle 1 phase.

RESULTANT TYPE IDENTIFICATION: SME () -6 Type: _____



THE TECHNICAL MATERIEL CORPORATION
 CABLE "TEPEI" TWX 710-566 1100 MAMARONECK, N.Y. 10543

THE WORLD-WIDE SYSTEM OF REMOTE CONTROLLED COMMUNICATIONS

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